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PATENT AND TRADEMARK DEPARTMENT			QAZI, SABIHA NAIM	
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			1612	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
	10/070,936	GLOCK ET AL.
Office Action Summary	Examiner	Art Unit
	Sabiha Qazi	1612
The MAILING DATE of this communication ap Period for Reply	ppears on the cover sheet with the	correspondence address
A SHORTENED STATUTORY PERIOD FOR REPWHICHEVER IS LONGER, FROM THE MAILING I - Extensions of time may be available under the provisions of 37 CFR 1 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory perior Failure to reply within the set or extended period for reply will, by statu Any reply received by the Office later than three months after the mail earned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUNICATION 1.136(a). In no event, however, may a reply be tind will apply and will expire SIX (6) MONTHS from the, cause the application to become ABANDONE	N. mely filed the mailing date of this communication. ED (35 U.S.C. § 133).
Status		
Responsive to communication(s) filed on 8/1. 2a) This action is FINAL . 2b) Th 3) Since this application is in condition for allow closed in accordance with the practice under	nis action is non-final. vance except for formal matters, pro	
Disposition of Claims		
4) Claim(s) 1-17 is/are pending in the applicatio 4a) Of the above claim(s) is/are withdress 5) Claim(s) is/are allowed. 6) Claim(s) 1-17 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/ Application Papers 9) The specification is objected to by the Examin	rawn from consideration. /or election requirement.	
10) The drawing(s) filed on is/are: a) acceptable and any objection to the Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct and the oath or declaration is objected to by the E	e drawing(s) be held in abeyance. Se ection is required if the drawing(s) is ob	e 37 CFR 1.85(a). ejected to. See 37 CFR 1.121(d).
Priority under 35 U.S.C. § 119		
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority document application from the International Bure. * See the attached detailed Office action for a list	nts have been received. nts have been received in Applicat iority documents have been receiv au (PCT Rule 17.2(a)).	ion No ed in this National Stage
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail D 5) Notice of Informal F 6) Other:	ate

Non-Final Office Action

Claims 1-17 are pending. No claim is allowed at this time. Amendments are entered.

Summary of this Office Action Thursday, January 15, 2009

- 1. Information Disclosure Statement
- 2. Copending Applications
- 3. Specification
- 4. 35 USC § 112 --- Second Paragraph Rejection
- 5. 35 USC § 112 --- First Paragraph Scope of Enablement Rejection
- 6. 35 USC § 103(a) Obviousness Rejection
- 7. Response to Remarks and Declarations
- 8. Communication

Application/Control Number: 10/070,936

Art Unit: 1612

STATUS: ISO 1750 (published)

8-(2,6-diethyl-*p*-tolyl)-1,2,4,5-tetrahydro-7-oxo-7*H*-pyrazolo[1,2-

IUPAC: d[1,4,5] oxadiazepin-9-yl 2,2-dimethylpropionate

8-(2,6-diethyl-4-methylphenyl)-1,2,4,5-tetrahydro-7-oxo-7*H*-pyrazolo[1,2-

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CAS: d[1,4,5]oxadiazepin-9-yl 2,2-dimethylpropanoate

REG. NO.: 243973-20-8

FORMULA: $C_{23}H_{32}N_2O_4$

ACTIVITY: herbicides (unclassified herbicides)

NOTES:

STRUCTURE:

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Information Disclosure Statement

Some references are cited in the specification. The listing of references in the

specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of

all patents, publications, or other information submitted for consideration by the Office, and

MPEP § 609.04(a) states, "the list may not be incorporated into the specification but must be

submitted in a separate paper." Therefore, unless the references have been cited by the examiner

on form PTO-892, they have not been considered.

Copending Applications

Applicants must bring to the attention of the examiner, or other Office official involved

with the examination of a particular application, information within their knowledge as to other

copending United States applications, which are "material to patentability" of the application in

question. MPEP 2001.06(b). See Dayco Products Inc. v. Total Containment Inc., 66 USPQ2d

1801 (CA FC 2003).

Specification

The specification has not been checked to the extent necessary to determine the presence

of all possible minor errors. Applicant's cooperation is requested in correcting any errors of

which applicant may become aware in the specification.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-17 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Following reasons apply:

What is intended by "customary formulation assistants" in claim 1?

It is unclear what "alkaline earth" in claim 2 is?.

What is "fenoxaprop-P-ethyl" as in amended claim 2.

35 USC § 112—Scope of Enablement Rejection

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-17 rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for the combinations such as combination of the compound 1.008 (or 1.007) and cloquincet-mexyl on pages 43 and 44. Applicant at the end of page 44 disclose that

"from Tables B2.1 to 2.4, it can be deduced that the addition of the oil additive MERGE to a mixture of two herbicides and one safener leads to a surprising increase in herbicidal action on the weeds without harming the crops"

Pinoxaden (compound 1.008 of formula i)

The specification does not enabled for the synergistic combination of a)all the compounds of formula 1 and herbicides b) which as claimed are herbicidally synergistic amount of at least one herbicide selected from clodinafop-p-propargyl, -fenoxaprop-P-ethyl, tralkoxydim, triasulfuron, amidosulfuron, tribenuron, idosulfuron, thifensulfuron-methyl, metsulfuron, flupyrsulfuron, sulfosulfuron, mecoprop, fluroxypyr, MCPA, 2,4-D ester, 2,4-D amine, triallate, prosulfocarb, dicamba, diflufenican, picolinafen, pendimethalin, trifluralin, bromoxynil, ioxynil, flucarbazone, florasulam, propoxycarbazone, and metosulam.

The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope with these claims.

Compound of formula I itself include very large number of compounds due to variety of substituents defined by G, R_1 and R_2 .

No synergism has been disclosed in the specification, which has been claimed. Applicant had no possession at the time this application was filed of claimed. The specification discloses the combination of compound 1.008 (one compound from formula (I) and cloquitocet-mexyl with tralkoxydim, fenoxaprop-ethyl and trisulfuron (see tables B2.1 to B2.4 on pages 43 and 44 in specification). The compounds of (b) as in claim 1 contains compounds having variety of different structures, which surely are expected to react differently. The prediction of **synergism** for the combination such a large number of compounds (b) having different properties and compound of formula (I) is therefore impossible.

Factors to be considered in determining whether a disclosure meets the enablement requirement of 35 U.S.C. 112, first paragraph, have been described in In re Colianni, 195 USPQ 150, 153 (CCPA 1977), have been clarified by the Board of Patent Appeals and Interferences in Ex parte Forman, 230 USPQ 546 (BPAI 1986), and are summarized in In re Wands (858 F2d 731, 737, 8 USPQ2d 1400, 1404 (Fed Cir. 1988). Among these factors are: (1) the nature of the invention; (2) the state of the prior art; (3) the relative skill of those in the art; (4) the predictability or unpredictability of the art; (5) the breadth of the claims; (6) the amount of direction or guidance presented; (7) the presence or absence of working examples; and (8) the quantity of experimentation necessary.

When the above factors are weighed, it is the examiner's position that one skilled in the art could not practice the invention without undue experimentation.

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The instant invention is drawn to a selective herbicidal composition comprising (a) herbicidally effective amount of a compound of Formula I and (b) herbicidally synergistic amount of at least one herbicide selected from clodinafop-p-propargyl, -fenoxaprop-P-ethyl, tralkoxydim, triasulfuron, amidosulfuron, tribenuron, idosulfuron, thifensulfuron-methyl, metsulfuron, flupyrsulfuron, sulfosulfuron, mecoprop, fluroxypyr, MCPA, 2,4-D ester, 2,4-D amine, triallate, prosulfocarb, dicamba, diflufenican, picolinafen, pendimethalin, trifluralin, bromoxynil, ioxynil, flucarbazone, florasulam, propoxycarbazone, and metosulam.

(1) The predictability or unpredictability of the art:

Claimed invention is unpredictable for the following reasons. The specification discloses the combination of compound 1.008 (one compound from formula (I) and cloquitocet-mexyl with tralkoxydim, fenoxaprop-ethyl and trisulfuron (see tables B2.1 to B2.4 on pages 43 and 44 in specification). The compounds of (b) as in claim 1 contain compounds having variety of different structures, which surely are expected to react differently. The prediction of synergism for the combination such a large number of compounds (b) having different properties and compound of formula (I) is therefore impossible.

(2) The breadth of the claims: The claims are broad; the compounds of formula I itself includes thousands of compounds and their combination with the multitude of different classes of herbicides which can be selected from clodinafop-p-propargyl, -fenoxaprop-P-ethyl, tralkoxydim, triasulfuron, amidosulfuron, tribenuron, idosulfuron, thifensulfuron-methyl, metsulfuron, flupyrsulfuron, sulfosulfuron, mecoprop, fluroxypyr, MCPA, 2,4-D ester, 2,4-D

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amine, triallate, prosulfocarb, dicamba, diflufenican, picolinafen, pendimethalin, trifluralin,

bromoxynil, ioxynil, flucarbazone, florasulam, propoxycarbazone, and metosulam.

. These classes are so structurally different from each other; it is impossible to predict any

SYNERGISTIC activity for such compounds.. For example, the three structures shown below

belong to extremely different class of chemical compounds.

(3) The amount of direction or guidance presented: There is no guidance in the

disclosure on how the invention can be used to predict the synergism for all the combinations as

claimed. There is no teaching combination of the compounds of formula 1 with all the

various classes of herbicides listed in part a) and part b) of claim 1.1

(4) The quantity of experimentation necessary

Since there is no guidance and/or direction provided by the Applicants for the wide

variety of the compounds and their synergistic combinations, the claims are broad, there is not

sufficient guidance presented in the specification for such a large number of claimed

combination of compounds for the reasons cited above, one skilled in the art would go through

undue experimentation to practice the invention as claimed.

A disclosure should contain representative examples, which provide reasonable assurance

to one skilled in the art that the compounds fall within the scope of a claim will possess the

¹ Examiner notes that Applicants in the specification disclose that "a specific safener will often be suitable only for a specific action with respect not only to the cultivated pants but also to the herbicide, and in some cases also subject to the mode of application, i.e. a specific safener will often be suitable only for a specific cultivated plant and a

specific class of herbicide. See paragraph 3 on page 1 of the specification.

alleged activity. See In re Riat et al. (CCPA 1964) 327 F2d 685, 140 USPQ 471; In re Barr et al. (CCPA 1971) 444 F 2d 349, 151 USPQ 724.

Accordingly, the instant claims do not comply with the enablement requirement of §112, since to practice the claimed invention in its "full scope" a person of ordinary skill in the art would have to engage in undue experimentation, with no assurance of success.

35 USC § 103(a) Obviousness Rejection

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.

- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over KRUGER et al. (EP 508,126), DAHMEN (DE 197 28 568), BOGER et al. (WO 96/21652), HAZEN et al (US 4,834,908) and the disclosure of Applicants own specification.

Applicants claim

- 1. (Currently amended) A selective herbicidal composition comprising, in addition to customary inert formulation assistants, as the active ingredient a mixture of
- a)
- a herbicidally effective amount of a compound of formula I

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(I)

or salts or diastereoisomers thereof, wherein:

R1 and R3 independently of one another are C1-C4-alkyl, C2-C4-alkynyl, C~-C4-halogenalkyl, C~-C6-alkoxy, or C~-C2-halogenalkoxy, with the proviso that R~ and R3 are not simultaneously methyl;

G is hydrogen, -C(O)-R30 or C(O)-O-R31;

R30 and R3 \sim independently of one another, are hydrogen, C \sim -C \sim 10-alkyl; and

b)

a herbicidally synergistic amount of at least one herbicide selected from clodinafop-p-propargyl, -fenoxaprop-P-ethyl, tralkoxydim, triasulfuron, amidosulfuron, tribenuron, idosulfuron, thifensulfuron-methyl, metsulfuron, flupyrsulfuron, sulfosulfuron, mecoprop, fluroxypyr, MCPA, 2,4-D ester, 2,4-D amine, triallate, prosulfocarb, dicamba, diflufenican, picolinafen, pendimethalin, trifluralin, bromoxynil, ioxynil, flucarbazone, florasulam, propoxycarbazone, and metosulam.

2. (Previously Presented) Composition according to claim 1, which contains, to antagonise the herbicide, an antidotally effective amount of a safener selected from cloquintocet, an alkali, alkaline earth, sulfonium or ammonium cation of cloquintocet, cloquintocet-mexyl, mefenpyr, an alkali, alkaline earth, sulfonium or ammonium cation of mefenpyr and mefenpyrdiethyl.

The references cited above teach combinations of pyrazilinnone compositions of formula I as safeners as presently claimed, which embraces Applicant's claimed invention.

WO 96/21652 teaches 4aryl and 4 heteroaryl 5 oxopyrazoline derivatives of formula (I) in which R,. R2 R3 and G as defined in claim 1 to compositions comprising these compounds to their use as insecticides acaricides or herbicides especially in crops of useful plants, and to selective herbicidal compositions comprising compounds of formula (I) and, as safeners herbicide antagonistically effective quantities of either a quinoline derivative of formula (X) Compounds of formula 1 as in claim has been generically taught by the reference. R2 and R3 can form a ring and G represents CO-A. See abstract of the invention. See the entire documents especially, especially lines 21 to 49 on page 31 abstract; 3rd para on page 23; 2nd para on page 28.

EP 508,126 teaches the composition of the combination of compounds of formula I and another active compound useful as herbicides.

DE 197 28 568 teaches the herbicidal combination of Fenoxaprop-ethyl, compound (III) Clodinafop-propargyl with another herbicide. The combination of these compounds are claimed in part b of claim1. See Compound (II) Fenoxaprop-ethyl, compound (III) Clodinafop-propargyl on page 8.

HAZEN et al. teaches that addition of oil in composition increases the herbicidal activity (abstract). It further teaches that certain crop oil concentrates enhance the activity of a broad spectrum of herbicides to an unexpected high level. Furthermore, it teaches these "same crop oil concentrates surprisingly defeat the antagonism which is often created

when two or more herbicides are utilized simultaneously" (lines 58-63 in col. 1). See lines 31-57 in column 4, lines 58-65 in col. 4., the abstract, tables especially tables IX and XI and examples 1-3 in col. 4.

Specification of present invention discloses that all the compounds in the present invention are known. See lines 17 to 27 on page 1, and on pages 10-12.

Ascertaining the differences between the prior art and the claims at issue, and resolving the level of ordinary skill in the pertinent art (MPEP § 2141.012)

Because of each compound appears to be well known in the prior art as cited above, the combination of the compounds would have been obvious at the time the invention was filed. It would appear that It is *prima facie* obvious to combine two compositions each of which is taught by the prior art to be useful for the same purpose in order to form a third composition that is to be used for the very same purpose; the idea of combining them flows logically from their having been individually taught in the prior art. In re Kerkhoven, 205 USPQ 1069.

If two or more herbicides functioned by somewhat different biological mechanisms, their combined use could clearly be expected to be more efficient than the use of merely a larger amount of any one of the individual herbicides since multiple biological pathways would be affected at the same time. It is also known that, in any population of plants as with any organisms, some will be more resistant to a particular biocide than others.

As has been decided by the court, a combination, for the same purpose, of one additive explicitly disclosed in the prior art and another suggested by the prior art is at least prima facie obvious. In re Susi, 169 USPQ 423. There is nothing inventive in a composition of old

ingredients of known properties with each ingredient functioning individually as expected.

In re Sussaman 58 USPQ 262.

Resolving the level of ordinary skill in the pertinent art (MPEP §2141.012)

One skilled in the art would be motivated to prepare the combinations of excellent herbicides because prior art teaches the use of materials in combination, each of which is known to function for intended purpose, is generally held to be *prima facie* obvious.

See MPEP 2144.06 and see *Ex parte Quadranti*, 25 USPQ2d 1071 (Bd. Pat. App. & Inter. 1992).

See Ex parte Quadranti where it was held that if two or more herbicides functioned by somewhat different biological mechanisms, their combined use could clearly be expected to be more efficient than the use of merely a larger amount of any one of the individual herbicides since multiple biological pathways would be affected at the same time. It is also known that, in any population of plants as with any organisms, some will be more resistant to a particular biocide than others. The statistical probability of a large number of plants having higher than usual resistance to all of the components of any particular combination of herbicides, however, is not great. "Use of materials in combination, each of which is known to function for intended purpose, is generally held to be prima facie obvious, and in instant case, use of combination of herbicides is so notoriously well known as to be capable of being taken by official notice; generalizations such as Colby formula are not particularly useful in determining whether

synergism has been demonstrated, since formula inherently results in expectation of less than additive effect for combination of herbicides, since there is no evidence that such approach is considered valid by significant number of ordinarily skilled workers in relevant area of technology, and since it could be reasonably argued that in most cases, additive or better than additive results could be expected for combination of herbicides."

"There is no single, appropriate test for determining whether synergism has been demonstrated for chemical combination; rather, facts shown in each case must be analyzed to determine whether chosen method has clearly and convincingly demonstrated existence of synergism or unobvious result". "Assuming arguendo that the differences in values presented are statistically significant, there is no evidence that they represent a true, practical advantage. In re Freeman, 474 F.2d 1318, 177 USPQ 139 (CCPA 1973); In re Klosak, 455 F.2d 1077, 173 USPQ 14 (CCPA 1972); In re D'Ancicco, 439 F.2d 1244, 169 USPQ 303 (CCPA 1971). Also, prescinding from the Colby formula test, which as we have already indicated is at best controversial and in our view probably invalid, there is no evidence that the differences are unexpected. In re Merck, 800 F.2d 1091, 231 USPQ 375 (Fed.Cir. 1986); In re Longi, 759 F.2d 887, 225 USPQ 645 (Fed.Cir. 1985); In re Freeman, supra".

It is *prima facie* obvious to combine two compositions each of which is taught by the prior art to be useful for the same purpose in order to form a third composition that is to be used for the very same purpose; the idea of combining them flows logically from their having been individually taught in the prior art. In re Kerkhoven, 205 USPQ 1069.

In the light of the forgoing discussion, the Examiner's ultimate legal conclusion is that the subject matter defined by the instant claims would have been obvious within the meaning of 35 U.S.C. 103(a).

Declarations

All the declarations filed by Applicants have been considered the data was not considered unexpected.

Response to Arguments

Arguments are found persuasive therefore all the rejections are withdrawn. New rejections are being made. *See Ex parte Quadranti*, 25 USPQ2d 1071 (Bd. Pat. App. & Inter. 1992).

Communication

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sabiha Qazi whose telephone number is (571) 272-0622. The examiner can normally be reached on any business day except Wednesday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Krass Frederick can be reached on (571) 272-0580. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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/Sabiha Qazi/

Primary Examiner, Art Unit 1612

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